



Selection of Contract Type for Launch Services

“The Right Tool for the Right Job”

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Outline

- Selection Criteria / Factors
- Contract Type Descriptions
- Launch Service Requirements
- Applied Experience
- Findings

FAR Part 16

Selecting Contract type

Describes types of contracts that may be used in acquisitions. It prescribes policies and procedures and provides guidance for selecting a contract type appropriate to the circumstances of the acquisition.

- Variation of type:
 - Degree of responsibility for the cost of performance
 - Amount of profit incentive offered
 - “Firm-fixed-price” to “Cost-plus-fixed-fee”
- Selection objectives
 - NEGOTIATE a contract type and price (estimated cost and fee)
 - RESULTING in
 - A reasonable contractor risk
 - Provide the greatest incentive for efficient and economical performance
 - adequate Government resources are available to award and manage

FAR Part 16

Selecting Contract type (con't)

Describes types of contracts that may be used in acquisitions. It prescribes policies and procedures and provides guidance for selecting a contract type appropriate to the circumstances of the acquisition.

- Fixed-price
 - Firm-fixed- Price, “utilizes the basic profit motive of the business enterprise”
 - Used when the risk involved is minimal or can be predicted with acceptable certainty
 - Without a reasonable basis for firm pricing, a contract type that ties profit to contractor performance should be considered
- Cost-reimbursement
 - Circumstances do not allow the agency to define its requirements sufficiently
 - Uncertainties in contract performance do not permit costs to be estimated with sufficient accuracy
 - Limitations:
 - contractor’s accounting system is adequate for determining costs applicable to the contract

Use of cost-reimbursement contracts is prohibited for the acquisition of commercial items

Selection Factors

- *Price competition*
- *Price analysis*
- *Cost analysis*
- *Type and complexity of the requirement*
- *Combining contract types*
- *Urgency of the requirement*
- *Period of performance or length of production run*
- *Contractor's technical capability and financial responsibility*
- *Adequacy of the contractor's accounting system*
- *Concurrent contracts*
- *Extent and nature of proposed subcontracting*
- *Acquisition history*

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Fixed-Price Contracts

Fixed-price types of contracts provide for a firm price or, in appropriate cases, an adjustable price.

- Firm-fixed-price (FFP)
- Fixed-price with *economic price adjustment*
- Fixed-price *incentive (FPI)*
- Fixed-price with *prospective price redetermination*
- Fixed-ceiling-price with *retroactive price redetermination*
- Firm-fixed-price, *level-of-effort term contracts (FPLOE)*

Time-and-materials contracts and labor-hour contracts
are not
fixed-price contracts

Firm-fixed-price Contracts

- Provides for a price that is not subject to any adjustment on the basis of the contractor's cost experience
 - Contractor assumes maximum risk and full responsibility for all costs and profit or loss
 - It provides maximum incentive for the contractor to control costs and perform effectively
 - Imposes a minimum administrative burden upon the contracting parties
- **Application**
 - Acquiring commercial items
 - Acquiring other supplies or services
 - On the basis of reasonably defined function
 - Detailed specifications
 - Can establish fair and reasonable prices at the outset

Firm-fixed-price contract can use an award-fee incentive and performance or delivery incentives when the award fee or incentive is based solely on factors other than cost

Fixed-Price Incentive

“Incentive Contracts”

These contracts are mainly set up to incentivize contractors to control costs and share in the profit from that control, however other performance factors can be used.

- **Description**

- Provides for adjusting profit and establishing final price by formula based on negotiated cost to target cost (Share line!)
- Motivate the contractor to strive for outstanding performance

- **Application**

- Contractor's cost responsibility provides a positive profit incentive for cost or performance control
- Fair and reasonable incentive for contractor to assume risks

- **Limitations**

- Adequate Accounting System
- Adequate cost /pricing information
- Negotiated up front

Fixed-price with *economic price adjustment*

- Provides for upward and downward revision of the stated contract price upon the occurrence of specified contingencies.
- Economic price adjustments are of three general types
 - Based on established prices
 - Based on actual costs of labor or material
 - Based on cost indexes of labor or material

Serious doubt concerning the **stability of market or labor conditions** that will exist during an extended period of contract performance

Fixed-price with *prospective price redetermination*

- Prospective redetermination, at a stated time or times during performance, of the price for subsequent periods of performance.
- Acquisitions of quantity production or services
 - Possible to negotiate a fair and reasonable firm fixed price for an initial period
 - The initial period should be the longest period for which it is possible to negotiate a fair and reasonable firm fixed price
 - Each subsequent pricing period should be at least 12 months
 - But not for subsequent periods of contract performance.
 - Provide for a ceiling price based on evaluation of the uncertainties involved in performance and their possible cost impact
 - Provide for assumption of a reasonable proportion of the risk by the contractor
 - once established, may be adjusted only by operation of contract clauses
 - equitable adjustment
 - other revision of the contract price under stated circumstances.

Limitations:

The prospective pricing periods can be made to conform with contractor's accounting system
There is reasonable assurance that price redetermination actions will take place promptly

Fixed-ceiling-price with *retroactive price redetermination*

- Retroactive price redetermination within the ceiling *after* completion of the contract.
- **Application**
 - Appropriate for research and development contracts estimated at \$150,000 or less
 - when it is established at the outset that a fair and reasonable firm fixed price cannot be negotiated
 - Amount involved and short performance period make the use of any other fixed-price contract type impracticable.
 - A ceiling price is negotiated at a level that reflects a reasonable sharing of risk by the contractor
 - May be adjusted only by contract clauses providing for
 - Equitable adjustment
 - Other revision of the contract price under stated circumstances.
 - Awarded only after negotiation of a billing price that is as fair and reasonable
 - Provides the contractor no cost control incentive except the ceiling price

Contractor's management effectiveness and ingenuity will be considered in retroactively re-determining the price

Firm-fixed-price *level-of-effort term contracts (FPLOE)*

- **Description**

- The contractor to provide
 - specified level of effort
 - over a stated period of time
 - on work that can be stated only in general terms
- The Government to pay the contractor a fixed dollar amount.

- **Application.**

- investigation or study in a specific research & development area
- The product of the contract is a report showing the results achieved through application of the required level of effort
- However, payment is based on the effort expended rather than on the results achieved.

Limitations.

This contract type may be used only when—

- (a) The work required cannot otherwise be clearly defined;
- (b) The required level of effort is identified and agreed upon in advance;
- (c) There is reasonable assurance that the intended result cannot be achieved by expending less than the stipulated effort; and
- (d) The contract price is \$150,000 or less, unless approved by the chief of the contracting office

Cost Reimbursable Contracts

Cost-reimbursement types of contracts provide for payment of allowable incurred costs, to the extent prescribed in the contract. These contracts establish an estimate of total cost for the purpose of obligating funds and establishing a ceiling that the contractor may not exceed (except at its own risk) without the approval of the contracting officer.

- Cost contracts
- Cost-sharing contracts
- Cost-plus-incentive-fee contracts
- Cost-plus-award-fee contracts
- Cost-plus-fixed-fee contracts

Cost contracts

- A cost contract is
 - a cost-reimbursement contract
 - in which the contractor receives no fee
- A cost contract may be appropriate for
 - research and development work
 - with nonprofit educational institutions
 - other nonprofit organizations

Cost-sharing contracts

- A cost-sharing contract
 - Cost-reimbursement contract in which
 - Contractor receives no fee
 - Reimbursed only for an agreed-upon portion of its allowable costs
- A cost-sharing contract may be used when
 - Contractor agrees to absorb a portion of the costs
 - Expectation of substantial compensating benefits

Cost-plus-incentive-fee contracts

- A cost-plus-incentive-fee contract is
 - cost-reimbursement contract that provides
 - Initially negotiated fee
 - Adjusted later by a formula
 - Based on the relationship of total allowable costs to total target costs
 - Where required supplies or services can be acquired at lower costs
 - With improved delivery or technical performance
 - relating the amount of profit or fee payable under the contract to the contractor's performance
- Incentive contracts are designed to obtain specific acquisition objectives
 - Establishing reasonable and attainable targets
 - Including appropriate incentive arrangements
 - motivate contractor efforts that might not otherwise be emphasized
 - discourage contractor inefficiency and waste
 - When predetermined formula-type incentives
 - On technical performance or delivery are included
 - Increases in profit or fee are provided only for achievement that sur-passes the targets
 - Decreases are provided for to the extent that such targets are not met
 - The incentive increases or decreases are applied to performance targets rather than minimum performance requirements

Award-fee contracts are a type of incentive contract

Cost-plus-award-fee contracts

- Application:
 - The work to be performed
 - Neither feasible nor effective to devise predetermined objective incentive targets applicable to
 - Cost
 - Schedule
 - Technical performance
 - The likelihood of meeting acquisition objectives will be
 - Enhanced by using a contract that effectively motivates the contractor toward
 - exceptional performance
 - provides the Government with the flexibility to evaluate
 - actual performance
 - The conditions under which it was achieved

Any additional administrative effort and cost required to monitor and evaluate performance are justified by the expected benefits as documented by a risk and cost benefit analysis

Cost-plus-fixed-fee contracts

- Definition:
 - A cost-reimbursement contract that provides for
 - payment to the contractor of a negotiated fee that is fixed at the inception of the contract
 - The fixed fee does not vary with actual cost, but may be adjusted as a result of changes in the work to be performed under the contract
 - Permits contracting for efforts that might otherwise present
 - Great risk to contractors
 - but it provides the contractor only a minimum incentive to control costs
- Application.
 - Suitable for use when
 - Contract is for the performance of research or preliminary exploration or study
 - The level of effort required is unknown
 - Development and test
 - Cost-plus-incentive-fee contract is not practical.
 - Should not be used in development of major systems
 - once preliminary exploration, studies, and risk reduction have indicated
 - A high degree of probability that the development is achievable
 - The Government has established reasonably firm performance objectives and schedules

Limitations. No cost-plus-fixed-fee contract shall be awarded unless the contracting officer complies with all limitations

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Requirements

What does the Government want from a launch service provider, and what are they willing to do to incentivize that behavior?

- **Mission Assurance**
 - Single or Multiple providers
 - Vehicle & Mission Certification
 - Pedigree reviews
 - Flight Readiness Reviews
- **Lowest Cost**
 - Fixed & variable Costs
 - Quantity pricing
 - Incentives
- **Schedule**
 - Manifest (Capacity)
 - Flexibility

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My Experience

- Evolved Expendable Launch Vehicle (EELV)
 - Buy 1 & 2 ; FAR Part 12 Commercial contract, FFP
 - Got the best price in head to head competition
 - Bad Market projections proved price offerings too low
 - Almost drove companies out of the business
 - Buy 3; FAR Part 15, CPAF & FP
 - Fixed costs (“Marching Army”) – Cost Plus Award Fee
 - Control costs – inability / unwillingness to define tasks made control unlikely
 - Incentivize Mission success and cost reductions – goals seemed at odds
 - Variable Cost (Vehicle Production) – Mission Success Incentive (MSI)
 - “One-at-a-time” Mentality drove unit cost
 - Inventory and obsolescence caused added stress to manageability

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Findings

Without a reasonable basis for firm pricing, a contract type that ties profit to contractor performance should be considered

• Fixed Price

- Profit motive of the business
 - Use this for “best price” in a competition
 - Incentive Fee can drive continuance of desired behavior
 - “Mission Success Incentive “must be high to drive behavior!
 - Number of Missions drive Price point
- Risk involved is minimal or predictable
 - Requirements changes are “openers”
 - Mission-to-mission variation is a baseline change!

• Cost Reimbursable

- Requirements sufficiently defined
 - Use if significant changes are anticipated
 - If the Government can’t agree on baseline then consider
 - But Earned Value Management (EVM) only works if tasks are defined (no LOE)
- Costs estimated accurately
 - Rates are known – level of effort needs to be understood (man-hours for the task)
- Contractor’s accounting system
 - Cost Accounting Standards (CAS)
 - Generally Accepted Accounting Principles (GAAP)

BACK UP

Award-fee Pool Earned Percentages

Award-Fee Adjectival Rating	Award-Fee Pool Available To Be Earned	Description
Excellent	91%-100%	Contractor has exceeded almost all of the significant award-fee criteria and has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period.
Very Good	76%-90%	Contractor has exceeded many of the significant award-fee criteria and has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period.
Good	51%-75%	Contractor has exceeded some of the significant award-fee criteria and has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period.
Satisfactory	No Greater Than 50%	Contractor has met overall cost, schedule, and technical performance requirements of the contract in the aggregate as defined and measured against the criteria in the award-fee plan for the award-fee evaluation period.
Unsatisfactory		